

## ANNUAL STORMWATER POLLUTION PREVENTION PLANNING (SWPPP) TRAINING



June 2012

All Employees



## Why do you have to be here?



- Because your facility operates under a ***General Discharge Permit for Stormwater Associated with Industrial Activities.***
  - "General Discharge Permit"

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## Industrial Activities? Who me!?

- transportation facilities
  - (but only those who do vehicle maintenance)
- sewage treatment plants designed for over 1.0 MGD
- landfills
- recycling facilities
- etc.
- Considered INDUSTRIAL....mmhmm

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## 14 Industrial Frederick County Facilities

- 14 county facilities covered by a permit
- 1 was able to get no-exposure certified.
  - Green Valley Fire-Rescue Station
- The remaining 13 have developed SWPPPs
  - **Fleet Maintenance:** LEC, TransIT, FCPS Hayward Rd, 331 Montevue,
    - Satellite yards: Johnsville, Thurmont, Urbana, Myersville, Jefferson
  - **WWTPs:** Ballenger Creek, New Market, Jefferson
  - **Landfill:** Reichs Ford

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## What is stormwater?



- Stormwater is defined as precipitation runoff, surface runoff and drainage, street runoff and snow melt runoff.

## What's Wrong With This Picture?



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## What's Wrong With This Picture?



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## Typical Stormwater Pollutants

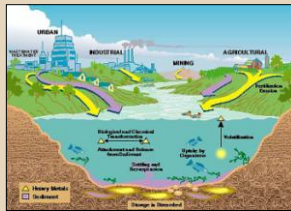
- Petroleum (oil, grease)
- Cooking grease/oils
- Sediment (soil)
- Salt
- Trash and debris
- De-icing fluids and coolants (glycols)
- Fertilizers, Herbicides, and Pesticides
- Fecal bacteria (pet & human feces)



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## POTENTIAL EFFECTS

- Human health
  - Direct ingestion during recreation activities
  - Food chain
- Environmental
  - Benthic invertebrates
  - Fish
  - Birds
- Aesthetics
  - Odor
  - Visual (e.g., scums, sheens, etc.)
  - Garbage



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## 6 Typical Pollution Sources at Industrial Facilities

1. Loading and Unloading Operations
2. Outdoor Storage
3. Outdoor Process Activities
4. Dust or Particulate Generating Processes
5. Illicit Connections and Non-Stormwater Discharges
6. Waste Management

-EPA

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## Uh oh!

Forklift + distracted driver + 55 gallon drum = STORMWATER POLLUTION



331 Montevue



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## Versar's 2011-2012 Audit



- 6 month audit to identify all County industrial facilities & get them into compliance
- Versar and Sustainability & Environmental Resources Office wrote 13 SWPPPs.
- Culminated in an EPA audit in May!

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## Allowable Discharges from your facility:

(MD 2008 MSGP, 1.1.3)

The following are the non-stormwater discharges authorized under this permit, provided the non-stormwater component of your discharge is in compliance with Part 2.1.2.10:

- Discharges from fire-fighting activities;
- Fire hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizers are applied in accordance with the approved labeling;
- Pavement wash waters where no detergents are used and no toxic or hazardous materials have occurred (unless all such materials are removed);
- Routine external building washdown that does not use detergents;
- Uncontaminated ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

**NOT MANY!**

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Are you allowed to wash this equipment outdoors?

**POP QUIZ!**



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## Stormwater Pollution Prevention Plans (SWPPP)



Oil leak at TransIT



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## What is a SWPPP?



- SWPPP = Stormwater Pollution Prevention Plan
- A site-specific, written document that:
  1. Identifies potential sources of stormwater pollution at the industrial facility;
  2. Describes stormwater control measures that are used to reduce or eliminate pollutants in stormwater discharges from the industrial facility; &
  3. Identifies procedures the operator will use to comply with the terms and conditions of the General Discharge Permit.

**sometimes called a "P2 Plan"**

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## TYPICAL ACTIVITIES SUBJECT TO OVERSIGHT

Anything done outside and exposed to rain/snow:

- Fueling
- Maintaining Vehicles and Equipment
- Washing Vehicles and Equipment
- Loading and Unloading Raw Materials
- Liquid Storage in Above-Ground Tanks
- Salt Storage
- Dumpsters
- Soil/compost/sand stockpiles

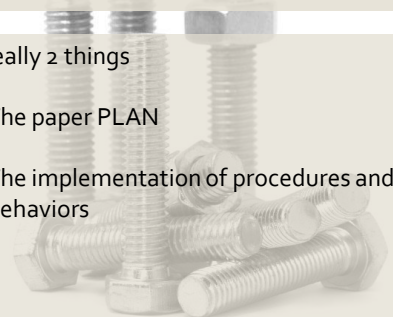


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## What is a SWPPP, really?

It's really 2 things

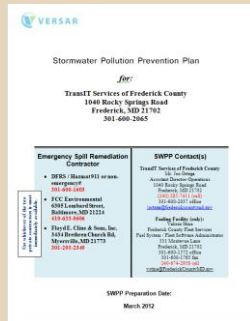
1. The paper PLAN
1. The implementation of procedures and behaviors



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## Stormwater Pollution Prevention Plan Includes:

- Stormwater Pollution Prevention Team
- Site Plan
- Inventory Materials Exposed to Stormwater
- Implement Best Management Practices
  - Includes Good Housekeeping**
- Employee Training Requirements
- Monthly Site Inspections
- Annual Site Assessment
- Spill Response Procedures



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## Good Housekeeping

- EPA expects you to set an example for the private sector.
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- You are the government and you are expected to set an example for all to follow.

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## Good Housekeeping



- Specific good housekeeping practices vary by facility...

Some examples:

- Regular pickup and disposal of waste materials and scrap equipment;
- Maintenance of clean and orderly work spaces;
- All small mechanical equipment and related chemicals necessary for their operation as well as small gasoline containers are kept indoors.
- Salt is kept within confines of salt barn at all times when active deliveries aren't being made or salt spreader loading isn't occurring.

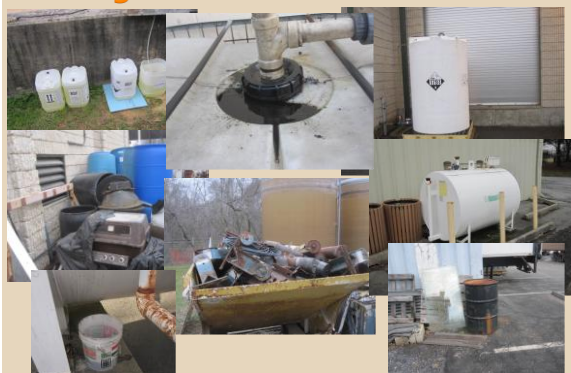
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## Good Housekeeping

- Place drip pans beneath leaking equipment, valves, and fill lines.
- Sediment and floatables on paved parking areas is regularly swept to minimize loading to stormwater infiltration pond.
- All used parts are drained of fluids prior to disposal.
- Batteries and other significant materials are stored inside.
- Staff clean up leaks, drips, and other spills using dry methods. NEVER WATER or DETERGENTS.
- Etc. etc. etc.

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## Collage of Violations



## Employee Training

- All employees from a facility, once per year and all new hires upon entering workforce.

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## Top 10 Common Compliance Failures at Industrial Facilities



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1. No SWPPP
2. Control measures described in SWPPP not used
3. No SWPPP on-site
4. SWPPP not signed
5. Stormwater pollution prevention team not up-to-date
6. On-site staff not familiar with SWPPP
7. Improper collection of visual assessment samples.
8. Uncovered dumpsters
9. Poor employee/contract staff training
10. Inspection or monitoring records are not kept with the SWPPP

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## Spill Response and Notification

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### Chain of Command

- Report all spills or leaks to the SWPPP Team Leader immediately.
- You may not walk away from a spill or active leak.
- Your SWPPP Team Leader or one of the other SWPPP team members will fill out the spill reporting form with your input.
  - A SWPPP team leader will contact National Response Center and/or MDE to report spills.

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### Chain of Command

- If you are the only one on-site during a MAJOR SPILL contact 911 or the Emergency Spill Contractors.
- You must remain on-site until the Fire Department, or MDE gives you permission to leave the site of the spill.

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1. Minor vs. Major Spills
2. Response and Notification



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## Minor Spills

- Minor spills are considered to be those of **less than 5-gallons** which pose no significant harm to human health or the environment and have not entered the storm sewer system, stormwater pond, water body or the groundwater table.



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## Minor Spill Response Procedures

- Stop leaks
  - Roll drums upright (hole pointing up)
  - Turn off process
  - Shut pipe valves
- Contain spills
  - Booms, pads, sand, dirt
- Divert runoff from spills away from storm drain inlets
- Patch leaks – temporary patch until a permanent solution is applied
- Recover/remove contaminated materials



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## Minor Spill Notification

- All minor spills must be documented by the SWPPP Team members or other designated personnel using the Spill/Release Incident Form (Attachment F)
- Keep the original filled spill form in the SWPPP.
  - A copy of filled spill form must be sent to the Superintendent.
  - A copy of the filled spill form is sent to MDE.

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## MDE Reporting Requirements

- COMAR 26.10.01.03
- All oil spills onto **land or water**, including oil spills from vehicles, ships, boats, or vessels of any kind, must be reported to MDE immediately by phone (but not later than **2 hours** after detection).
- MDE requires written report as well within 10 days of clean up.
- No volume threshold for reporting.

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The form is titled 'Spill/Release Incident Form' and is part of the 'State of Maryland Department of the Environment Emergency Response Division'. It contains sections for:
 

- Location of Spill/Release:** Includes fields for City/Town, MD County, ZIP, and a checkbox for 'Transportation Incident'.
- Cause of spill:** Includes a checkbox for 'Spill from Vehicle' and a checkbox for 'Spill from Other Source'.
- Detailed Description:** Includes fields for 'Product Name', 'Quantity', 'Amount Spilled/Released', and 'Cleanup Procedure'.
- Signature:** Includes fields for 'Name', 'Title', and 'Signature'.
- Notification Numbers:** Includes fields for 'MDE Notification Number' and 'Other Notification Numbers'.
- Amount Spilled/Released:** Includes fields for 'Volume', 'Weight', and 'Concentration'.
- Cleanup Procedure:** Includes fields for 'Cleanup Method', 'Cleanup Date', and 'Cleanup Time'.

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## Major Spills

- Major** spill is considered an emergency. It is a spill that cannot be safely contained by staff or cleaned up and/or has made its way into the storm sewer system, stormwater pond, waterbody or groundwater table or is a threat to human health.

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## Major Spill continued

1. The discharge is large enough to spread beyond the immediate discharge area;
2. The discharged material enters a storm drain or stream, lake;
3. The discharge requires special equipment or training to cleanup; and/or
4. The discharged material poses a hazard to human health or safety.



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## CALL THE CONTRACTOR!

The county has a contract with the following emergency response contractors.

- **DFRS / Hazmat**  
911 or non-emergency#  
301-600-1603
- **FCC Environmental**  
6305 Lombard Street, Baltimore  
410-633-0606
- **Floyd E. Cline & Sons, Inc.**  
3434 Brethren Church Rd, Myersville  
301-293-2349



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## Major Spill Notification

- All major spills must be documented by the Stormwater Pollution Prevention Team members or other designated personnel using the Spill/Release Incident Form (Attachment F)
- SWPPP team leader or whomever is on site will contact BOTH:

1. **OF THE ENVIRONMENT**
  - 1-(866) 633-4686, available on a 24-hour basis.
2. **NATIONAL RESPONSE CENTER**
  - 1-(800) 424-8802, available on a 24-hour basis.

- Keep original filled form in the SWPPP folder.
- A copy of filled form must be sent to the Superintendent.
- A copy is mailed to MDE within ten days.

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## N.R.C. Oil Spill Reporting Requirements:

1. Violate applicable water quality standards;
2. Cause a film or "**sheen**" upon, or discoloration of the surface of the water or adjoining shorelines; or
3. Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

- NRC is the federal government's centralized reporting center, which is staffed 24 hours per day by U.S. Coast Guard personnel.

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## MDE Reporting Requirements

- All oil spills onto land or water, including oil spills from vehicles, ships, boats, or vessels of any kind, must be reported to MDE immediately (but not later than 2 hours after detection).
- MDE requires both verbal and written reports.
- No volume threshold mentioned.

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[illegible]

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## A woman with blonde hair, wearing a blue blazer over a white top, sits at a dark wooden desk. She is looking directly at the camera with a weary expression. The desk is completely buried under a massive, chaotic pile of papers, forms, and documents that reach up to the ceiling. More papers are scattered all over the floor around the desk. The background is a plain, light-colored wall.

- **Document your compliance!!!**
  - permits,
  - inspections,
  - maintenance,
  - monitoring,
  - corrective actions,
  - spills,
  - secondary containment failures,
  - trainings & curriculum
- It all must go in the on-site SWPPP!

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[illegible]

THE END

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